



Department of Decision Sciences

Statistics Seminar

## Gamma-Dirichlet Algebra

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12:30pm Room 3-E4-SR03 Via Röntgen 1 Milano

### Abstract

The Gamma-Dirichlet algebra corresponds to the decomposition of the gamma process into the independent product of a gamma random variable and a Dirichlet process. This structure allows us to study the properties of the Dirichlet process through the gamma process and vice versa. In this talk, we review some known results associated with this structure, and present several new results including the large deviations of the jump sizes of the gamma process, a random time change connecting a branching diffusion to a Fleming-Viot process, and an alternative proof of the reversibility of the Fleming-Viot process.